

IN THE CLAIMS:

1. (Currently Amended) An ultrasonic diagnostic system for preparing a diagnostic data including image by transmitting ultrasonic pulses to a living tissue, and receiving and analyzing reflected wave of the ultrasonic pulses, the ultrasonic diagnostic system comprising:

5 a beam scanning means for transmitting an ultrasonic beam having a plurality of ultrasonic pulses to a living tissue while successively changing over the radiating position of said ultrasonic beams, said plurality of ultrasonic pulses being transmitted at a repeated transmission frequency of a few kHz, said living tissue being a heart wall;

a reflected wave receiving means for receiving a plurality of wave signals reflected at the heart wall;

10 an analytical processing ~~unit to measure~~ means for measuring a backscattering intensity by using a scattering wave from a region of interest in the ~~living tissue~~ heart wall on a basis of the ~~reflected wave which is received~~ received plurality of wave signals;[[,]] and

a detecting means for detecting a variation of frequency of the measured backscattering intensity to obtain diagnostic data, said variation frequency being a frequency of tens to
15 hundreds of Hz ~~to detect a variation frequency of the measured backscattering intensity to obtain the diagnostic data to be available.~~

2. (Canceled)

3. (Currently Amended) The ultrasonic diagnostic system according to claim 1,

wherein the analytical processing [[unit]] means further comprises:

means for calculating a displacement waveform of the region of interest by applying a phased tracking method to the ~~reflected wave signal which is received~~ received plurality of wave signals.

4. (Currently Amended) The ultrasonic diagnostic system according to claim 3, wherein the analytical processing [[unit]] means further comprises:

means for calculating the backscattering intensity on the displacement waveform of the region of interest calculated by applying the phased tracking method.

5 - 6. (Canceled)

7. (Currently Amended) The ultrasonic diagnostic system according to claim [[5]] 1, wherein the analytical processing [[unit]] means further comprises:

means for displaying in an assessable manner [[the]] an instantaneous thickness variation velocity of the region of interest on [[the]] a basis of the variation frequency or the variation cycle of the detected backscattering intensity.

8. (Currently Amended) The ultrasonic diagnostic system according to claim 7, wherein the means for displaying has a function to convert the variation frequency or the variation cycle of the backscattering intensity of the region of interest into a suitable color or

a density level according to a predetermined color bar or gray scale, and a function to display
5 it in the converted form on a screen.

9. (Currently Amended) The ultrasonic diagnostic system according to claim 8,
wherein the function to display ~~on the screen~~ is to display superimposed over an M-mode image
the value of the variation frequency or the variation cycle of the backscattering intensity
converted into a color or a density level.

10. (Currently Amended) An ultrasonic diagnostic method for preparing a diagnostic
data including image by transmitting ultrasonic pulses to a living tissue, and receiving and
analyzing reflected wave of the ultrasonic pulses, the ultrasonic diagnostic method comprising:

transmitting an ultrasonic beam having a plurality of ultrasonic pulses to a living tissue
5 while successively changing over radiating position of said ultrasonic beam, said plurality of
ultrasonic pulses being transmitted at a repeated transmission frequency of a few kHz, said
living tissue being a heart wall;

receiving a plurality of wave signals which are reflected at the heart wall;

measuring a backscattering intensity by using a scattering wave from a region of interest
10 in the ~~living tissue~~ heart wall on a basis of the ~~reflected wave which is received~~ received
plurality of wave signals; and

detecting a variation frequency of the measured backscattering intensity to obtain the
diagnostic data ~~to be available~~, said variation frequency being a frequency of tens to hundreds

of Hz.

11. (Canceled)

12. (Currently Amended) The ultrasonic diagnostic method according to claim 10, wherein ~~[[the]]~~ a displacement waveform of the region of interest is calculated by applying a phased tracking method to the ~~reflected wave signal which is received~~ received plurality of wave signals.

13. (Original) The ultrasonic diagnostic method according to claim 12, wherein the backscattering intensity is calculated on the displacement waveform of the region of interest calculated by applying the phased tracking method.

14 -15. (Canceled)

16. (Currently Amended) The ultrasonic diagnostic method according to claim ~~[[14]]~~ 10, wherein ~~[[the]]~~ an instantaneous thickness variation velocity of the region of interest is displayed in an assessable manner on ~~[[the]]~~ a basis of the variation frequency or the variation cycle of the detected backscattering intensity.

17. (Original) The ultrasonic diagnostic method according to claim 16, wherein the

variation frequency or the variation cycle of the backscattering intensity of the region of interest is converted into a suitable color or a density level according to a predetermined color bar or gray scale and is displayed in the converted form on a screen, in order to display in an assessable manner the instantaneous thickness variation velocity of the region of interest.

18. (Original) The ultrasonic diagnostic method according to claim 17, wherein the value of the variation frequency or the variation cycle of the backscattering intensity converted into a color or a density level is displayed by superimposing over an M-mode image.

19. (New) An ultrasonic diagnostic method for preparing a diagnostic data, the ultrasonic diagnostic method comprising:

providing an ultrasonic diagnostic system;

providing a means for displaying an image;

transmitting an ultrasonic beam to a living tissue via said ultrasonic diagnostic system, said living tissue being a wall of a heart, said ultrasonic beam having a plurality of ultrasonic pulses, said plurality of ultrasonic pulses reflecting off said heart wall, said plurality of ultrasonic pulses being transmitted at a repeated transmission frequency of at least one kHz, said ultrasonic diagnostic system receiving said reflected plurality of ultrasonic pulses;

changing successively the radiating position of said ultrasonic beam via said ultrasonic diagnostic system;

measuring a backscattering intensity by using a scattering wave from a region of interest

in the heart wall based on intensity of said received plurality of ultrasonic pulses; and

detecting a variation frequency of the measured backscattering intensity to obtain the

15 diagnostic data, said variation frequency being a frequency of tens to hundreds of Hz;

creating an image based on said diagnostic data;

displaying said image on said display means.